

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1-58 are pending, of which claim 35 has been amended. The amendment to claim 35 is simply to provide clarification and/or to correct informalities noted by the Applicant, and is not to overcome prior art or any other objections.

Substitute Drawings

Applicant submits herewith a new set of formal drawings (sheets 1-8) to correct an informality noted by the Applicant. Specifically, the identifier for "Data Media Interfaces" in Fig. 8 was a duplicate number and has been changed from "826" to "825". All of the drawings otherwise remain unchanged. A corresponding correction to the Specification has also been provided herein.

35 U.S.C. §102 Claim Rejections

Claims 1-58 are rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 6,225,546 to Kraft et al. (hereinafter, "Kraft") (*Office Action* p.1). Applicant respectfully traverses the rejection.

Kraft relates generally to a technique for summarizing audio data (*Kraft*, col.1, lines 23-24). Kraft describes that an audio composition is converted to MIDI format which is devoid of the structural information that contributes to the overall sound of an audio wave (*Kraft* col.5, lines 11-22). A MIDI analyzer arranges the song data into a standard format and a component parses the file into MIDI primitive data (*Kraft*, col.5, lines 42-45). A builder component analyses the

1 MIDI data to detect repetitive patterns, and parses or breaks down the data into
2 component parts to create a hierarchal structure representative of the song
3 (e.g., into song, parts, tracks, measures, and notes) (*Kraft*, col.5, line 56 to col.6,
4 line 9; Fig. 5). This summarization hierarchy is analyzed with algorithms to detect
5 the main melody part (*Kraft* col.6, lines 61-64; col.13, lines 43-44). The main
6 melody part is used as a representative thumbnail of the composition which is the
7 end product of Kraft (*Kraft*, col. 13, lines 45-46). Thus, Kraft describes breaking
8 down an audio composition, determining the melody part, and using the melody
9 part for a representative summary of the composition.

10 Contrary to breaking down an audio composition to determine a single
11 representative part as described in Kraft, Applicant describes audio wave data
12 playback in an audio generation system to create audio representations of, for
13 example, interactive applications such as video games and Web sites. Multiple
14 audio sources provide audio content (e.g., wave or MIDI track components) to a
15 performance manager that receives the audio content and utilizes segment
16 components to produce audio instructions for input to an audio rendition manager
17 (*Description* p.13, lines 1-9). The audio rendition manager provides various audio
18 data processing components that generate an audio rendition, i.e. process audio
19 data into audible sound (*Description* p.13, lines 1-9). The audio rendition
20 manager also provides real-time, interactive control over audio data processing.
21 Thus, whereas Kraft only describes breaking down a single audio file to determine
22 a thumbnail representative of the file, Applicant describes that multiple audio
23 sources can be utilized to generate an audio rendition.

1 Claim 1 recites an audio generation system comprising “an audio
2 processing component configured to generate an audio rendition corresponding to
3 audio wave data”, “audio wave track components configured to generate playback
4 instructions that are routed to the audio processing component to initiate the audio
5 rendition being generated”, and “a segment component configured to play one or
6 more of the audio wave track components to generate the playback instructions”.

7 Kraft does not show or disclose track components configured to generate
8 playback instructions routed to an audio processing component to initiate
9 generation of an audio rendition, and which are to be played by a segment
10 component, as recited in claim 1. Kraft only mentions tracks as components of an
11 audio file or audio composition (*Kraft* col.6, lines 15-24). These tracks are not
12 played back, but rather algorithms are applied to a hierarchal structure that
13 includes the tracks to identify the melody portion of the audio composition for use
14 as a summary (*Kraft* col.6, lines 61-64). There is nothing in Kraft to indicate that
15 the track components generate playback instructions, or are played by a segment
16 component, as recited in claim 1.

17 The Office cites Kraft for an audio file (300) as the audio wave track
18 components recited in claim 1 (*Office Action* p.1). Applicant disagrees because
19 the track components described and claimed by the Applicant are more than just
20 an audio file without structure, which Kraft shows in Fig. 3 being converted to a
21 MIDI file. The MIDI file is then analyzed in Kraft to determine a representative
22 thumbnail which is only a portion of the audio composition. There is no
23 indication in Kraft that the audio file is to be played back by a segment
24 component. Nor does Kraft indicate that the audio file generates playback
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1 instructions which are routed to an audio processing component to initiate an
2 audio rendition being generated, as recited in claim 1.

3 Kraft also does not show or disclose a segment component configured to
4 play one or more of the audio wave track components to generate the playback
5 instructions, as recited in claim 1. Again, an audio file in Kraft is merely broken
6 down into component parts to determine a representative summary. As such, the
7 audio file is analyzed, but not played back. Kraft does not indicate any such
8 segment component to play track components and generate playback instructions.
9 The Office cites Kraft for a component builder (206) that detects repetitive
10 patterns and builds a summarization hierarchy (*Office Action* p.1). The component
11 builder described in Kraft, however, is not a segment component configured to
12 *play* audio wave track components and generate play back instructions which in
13 turn initiate an audio rendition, as recited in claim 1.

14 Kraft also does not show or disclose an audio processing component
15 configured to generate an audio rendition, as recited in claim 1. As described
16 above, Kraft only creates a thumbnail as a representative portion of a musical
17 composition. An audio rendition, as described by the Applicant, involves audible
18 playback of various track components derived from multiple audio sources.

19 Accordingly, claim 1 is allowable over Kraft for at least these reasons and
20 Applicant respectfully requests that the §102 rejection be withdrawn.

21
22 Claims 2-17 are allowable by virtue of their dependency upon claim 1.
23 Additionally, some or all of claims 2-17 are allowable over Kraft for independent
24 reasons. For example:
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1 Claim 2 recites “MIDI track components configured to generate event
2 instructions that are routed to the audio processing component to initiate a second
3 audio rendition” and “wherein the segment component is further configured to
4 play one or more of the MIDI track components to generate the event
5 instructions.” As described above in the response to the rejection of claim 1, Kraft
6 fails to disclose an audio rendition and therefore does not disclose a second audio
7 rendition. Further, Kraft does not describe a segment component to play MIDI
8 track components, as recited in claim 2. Kraft only describes that MIDI files are
9 analyzed and broken into component parts to determine a single representative
10 component. Accordingly, claim 2 is allowable over Kraft and the §102 rejection
11 should be withdrawn.

12 Claim 3 recites “a segment state that includes programming references to
13 each of the audio wave track components, the segment state configured to initiate
14 that one or more of the audio wave track components generate the playback
15 instructions”. The Office cites Kraft at col.4, lines 31-51 for commercially
16 available operating system software (*Office Action*, p.1). Applicant disagrees that
17 a mere cite to an operating system is a basis to reject the features recited in
18 claim 3, such as a segment state, programming references to each of the audio
19 wave tracks, and that the segment state initiates the track components to generate
20 playback instructions. The cited section of Kraft fails to disclose any of the
21 features recited in claim 3. Accordingly, the §102 rejection should be withdrawn.

22 Claim 5 recites “a performance manager that includes one or more segment
23 states, each segment state including programming references to each of the audio
24 wave track components” and “each segment state configured to initiate that one or
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1 more of the audio wave track components generate the playback instructions.”
2 The Office simply references to Fig. 2 of Kraft which merely shows a conceptual
3 block diagram of the system to generate an audio summary, as described in Kraft
4 (*Office Action*, p.2). The Office makes no indication as to what in Fig. 2 forms the
5 basis for a rejection of claim 5. Further, there is nothing about Fig. 2 that
6 discloses a performance manager, programming references, or a segment state as
7 recited in claim 5. Accordingly, the §102 rejection should be withdrawn.

8 Claim 8 recites that “the audio processing component is a synthesizer
9 component configured to receive the audio wave data from one or more audio
10 wave data sources, and is further configured to generate the audio rendition in
11 response to the playback instructions”. The Office cites Kraft for indicating that a
12 MIDI file is essentially a collection of tracks that typically represent different
13 instruments (*Office Action* p.2; *Kraft* col.5, line 62 to col.6, line 4). The cited
14 section of Kraft does not provide any basis to reject the recited features of claim 8.
15 For example, Kraft makes no mention of a synthesizer component and does not
16 disclose that an audio processing component is a synthesizer component.
17 Accordingly, the §102 rejection should be withdrawn.

18 Claim 10 recites that “the audio wave track components are further
19 configured to maintain the audio wave data as an embedded audio wave data
20 source.” Claim 11 recites that “the segment component is further configured to
21 maintain the audio wave data as an embedded audio wave data source”. To
22 support the rejection of claims 10 and 11, the Office simply states one word:
23 “(MIDI)” (*Office Action*, p.3). Applicant disagrees that the single word “MIDI”
24 constitutes a basis to reject claims 10 and 11. Further, there is nothing about
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1 “MIDI” in Kraft that discloses an embedded audio wave data source, as recited in
2 claims 10 and 11. Accordingly, the §102 rejection should be withdrawn.

3 Claim 12 recites that “the audio wave track components are further
4 configured to randomly select a variation of the audio wave data such that the
5 segment component plays the one or more audio wave track components that
6 correspond to the variation selection.” Kraft does not disclose the random
7 selection of variations of wave data such that the variation is played by the
8 segment component, as recited in claim 12. The Office cites Kraft for variations
9 that are pre-existing in the musical composition that is being analyzed (*Office*
10 *Action* p.3; *Kraft*, col.7 line 53 to col.9 line 15). These variations described in
11 Kraft are an obstacle to detecting the melody, and are merely part of the song
12 being analyzed. Kraft neither selects the variations randomly nor plays them.
13 Accordingly, Kraft does not disclose the recited features of claim 12 and the §102
14 rejection should be withdrawn.

15 Claim 14 recites that “the segment component is a programming object
16 having an interface that is callable by a software component of the audio
17 generation system to initiate that the segment component play the one or more
18 audio wave track components.”

19 Claim 15 recites that “the segment component is a programming object
20 having an interface that is callable by a performance manager to initiate that the
21 segment component play the one or more audio wave track components, and
22 wherein the audio wave track components are programming objects each having
23 an interface that is callable by the segment component to initiate that the one or
24 more audio wave track components generate the playback instructions.”
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1 The Office does not address the features recited in claims 14 and 15, or
2 even provide a basis for the rejection of these claims. Further, Kraft does not
3 show or disclose the features recited in claims 14 and 15. Accordingly, the §102
4 rejection of claims 14 and 15 should be withdrawn.

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6 Claim 18 recites an audio generation system comprising:

7 a MIDI track component configured to generate event instructions for MIDI
8 audio data received from a MIDI audio data source;

9 an audio wave track component configured to generate playback
10 instructions for audio wave data maintained in an audio wave data source;

11 a segment component configured to play the MIDI track component to
12 generate the event instructions, and further configured to play the audio wave
13 track component to generate the playback instructions; and

14 an audio processing component configured to receive the event instructions
15 and the playback instructions, and further configured to generate an audio
16 rendition corresponding to the MIDI audio data and to the audio wave data.

17 As described above in the response to the rejection of claim 1, Kraft does
18 not show or disclose the recited features of claim 18, such as audio wave track
19 components, generating playback instructions, a segment component, and
20 generating an audio rendition. Kraft simply analyzes a MIDI file that is broken
21 down for summarization. Further, Kraft does not describe that an audio rendition
22 is generated corresponding to both the MIDI audio data and the audio wave data,
23 as recited in claim 18.

24 Accordingly, claim 18 is allowable over Kraft and Applicant respectfully
25 requests that the §102 rejection be withdrawn.

1 Claims 19-35 are allowable by virtue of their dependency upon claim 18.
2 Additionally, some or all of claims 19-35 are allowable over Kraft for independent
3 reasons including those described above in the response to the rejection of claims
4 2-17. Accordingly, the §102 rejection of claims 19-35 should be withdrawn.

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6 Claim 36 recites a method comprising “initiating a segment component to
7 play one or more audio wave track components”, “generating playback
8 instructions for audio wave data with the one or more audio wave track
9 components”, and “communicating the playback instructions to an audio
10 processing component that generates an audio rendition corresponding to the audio
11 wave data.”

12 As described above in the response to the rejection of claim 1, Kraft does
13 not show or disclose the recited features of claim 36, such as a segment
14 component, generating playback instructions, or an audio processing component
15 that generates an audio rendition.

16 Accordingly, claim 36 is allowable over Kraft and the §102 rejection
17 should be withdrawn.

18
19 Claims 37-45 are allowable by virtue of their dependency upon claim 36
20 (either directly or indirectly). Additionally, some or all of claims 37-45 are
21 allowable over Kraft for independent reasons including those described above in
22 the response to the rejection of claims 2-17. Accordingly, the §102 rejection of
23 claims 37-45 should be withdrawn.

1 Claim 46 recites a method comprising “generating playback instructions for
2 audio wave data with an audio wave track component”, “generating event
3 instructions for MIDI audio data with a MIDI track component”, and
4 “communicating the playback instructions and the event instructions to an audio
5 processing component that generates an audio rendition corresponding to the audio
6 wave data and to the MIDI audio data.”

7 As described above in the response to the rejection of claims 1 and 36,
8 Kraft does not show or disclose the features recited in claim 46. Accordingly,
9 claim 46 is allowable over Kraft and the §102 rejection should be withdrawn.

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11 Claims 47-54 are allowable by virtue of their dependency upon claim 46
12 (either directly or indirectly). Additionally, some or all of claims 47-54 are
13 allowable over Kraft for independent reasons including those described above in
14 the response to the rejection of claims 2-17. Accordingly, the §102 rejection of
15 claims 47-54 should be withdrawn.

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17 Independent claim 55 along with dependent claims 56-58 are allowable
18 over Kraft for many of the reasons described above in response to the rejections of
19 claims 1-54. Accordingly the §102 rejection of claims 55-58 should also be
20 withdrawn.
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Respectfully Submitted,

By:

lee & hayes